(c) For each missing value of the mass produced, fed into the production process, fed into the transformation process, or fed into destruction devices, the substitute value of that parameter must be a secondary mass measurement where such a measurement is available. For example, if the mass produced is usually measured with a flowmeter at the inlet to the day tank and that flowmeter fails to meet an accuracy or precision test, malfunctions, or is rendered inoperable, then the mass produced may be estimated by calculating the change in volume in the day tank and multiplying it by the density of the product. Where a secondary mass measurement is not available, the substitute value of the parameter must be an estimate based on a related parameter. For example, if a flowmeter measuring the mass fed into a destruction device is rendered inoperable, then the mass fed into the destruction device may be estimated using the production rate and the previously observed relationship between the production rate and the mass flow rate into the destruction device.

§ 98.126 Data reporting requirements.

- (a) All facilities. In addition to the information required by \$98.3(c), you must report the information in paragraphs (a)(2) through (a)(6) of this section
- (1) Frequency of reporting under paragraph (a) of this section. The information in paragraphs (a)(2), (5), and (6) of this section must be reported annually. The information in paragraphs (a)(3) and (4) of this section must be reported once by March 31, 2012 for each process and operating scenarios that operates between December 31, 2010 and December 31, 2011. For other processes and operating scenarios, the information in paragraphs (a)(3) and (4) of this section must be reported once by March 31 of the year following the year in which the process or operating scenario commences or recommences.
- (2) You must report the total mass in metric tons of each fluorinated GHG emitted from:
- (i) Each fluorinated gas production process and all fluorinated gas production processes combined.

- (ii) Each fluorinated gas transformation process that is not part of a fluorinated gas production process and all such fluorinated gas transformation processes combined, except report separately fluorinated GHG emissions from transformation processes where a fluorinated GHG reactant is produced at another facility.
- (iii) Each fluorinated gas destruction process that is not part of a fluorinated gas production process or a fluorinated gas transformation process and all such fluorinated gas destruction processes combined.
- (iv) Venting of residual fluorinated GHGs from containers returned from the field.
- (3) The chemical identities of the contents of the stream(s) (including process, emissions, and destroyed streams) analyzed under the initial scoping speciation of fluorinated GHG at §98.124(a), by process.
- (4) The location and function of the stream(s) (including process streams, emissions streams, and destroyed streams) that were analyzed under the initial scoping speciation of fluorinated GHG at §98.124(a), by process.
- (5) The method used to determine the mass emissions of each fluorinated GHG, i.e., mass balance, process-vent-specific emission factor, or process-vent-specific emission calculation factor, for each process and process vent at the facility. For processes for which the process-vent-specific emission factor or process-vent-specific emission calculation factor are used, report the method used to estimate emissions from equipment leaks.
- (6) The chemical formula and total mass produced of the fluorinated gas product in metric tons, by chemical and process.
- (b) Reporting for mass balance approach. For processes whose emissions are determined using the mass-balance approach under §98.123(b), you must report the information listed in paragraphs (b)(1) through (b)(13) of this section for each process on an annual basis. Identify and separately report fluorinated GHG emissions from transformation processes where the fluorinated GHG reactants are produced at another facility. If you use an

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element other than fluorine in the mass-balance equation pursuant to §98.123(b)(3), substitute that element for fluorine in the reporting requirements of this paragraph.

- (1) If you calculate the relative and absolute errors under 98.123(b)(1), the absolute and relative errors calculated under paragraph §98.123(b)(1), as well as the data (including quantities and their accuracies and precisions) used in these calculations.
- (2) The balanced chemical equation that describes the reaction used to manufacture the fluorinated GHG product and each fluorinated GHG transformation product.
- (3) The mass and chemical formula of each fluorinated GHG reactant emitted from the process in metric tons.
- (4) The mass and chemical formula of the fluorinated GHG product emitted from the process in metric tons.
- (5) The mass and chemical formula of each fluorinated GHG by-product emitted from the process in metric tons.
- (6) The mass and chemical formula of each fluorine-containing reactant that is fed into the process (metric tons).
- (7) The mass and chemical formula of each fluorine-containing product produced by the process (metric tons).
- (8) If you use §98.123(b)(4) to estimate the total mass of fluorine in destroyed or recaptured streams, report the following.
- (i) The mass and chemical formula of each fluorine-containing product that is removed from the process and fed into the destruction device (metric tons).
- (ii) The mass and chemical formula of each fluorine-containing by-product that is removed from the process and fed into the destruction device (metric tons).
- (iii) The mass and chemical formula of each fluorine-containing reactant that is removed from the process and fed into the destruction device (metric tons).
- (iv) The mass and chemical formula of each fluorine-containing by-product that is removed from the process and recaptured (metric tons).
- (v) The demonstrated destruction efficiency of the destruction device for each fluorinated GHG fed into the de-

vice from the process in greater than trace concentrations (fraction).

- (9) If you use §98.123(b)(15) to estimate the total mass of fluorine in destroyed or recaptured streams, report the following.
- (i) The mass of fluorine in each stream that is fed into the destruction device (metric tons).
- (ii) The mass of fluorine that is recaptured (metric tons).
- (iii) The weighted average destruction efficiency of the destruction device calculated for each stream under \$98.123(b)(16).
- (10) The fraction of the mass emitted that consists of each fluorine-containing reactant.
- (11) The fraction of the mass emitted that consists of the fluorine-containing product.
- (12) The fraction of the mass emitted that consists of each fluorine-containing by-product.
- (13) The method used to estimate the total mass of fluorine in destroyed or recaptured streams (specify §98.123(b)(4) or (15)).
- (c) Reporting for emission factor and emission calculation factor approach. For processes whose emissions are determined using the emission factor approach under §98.123(c)(3) or the emiscalculation factor sion §98.123(c)(4), you must report the following for each process. Fluorinated GHG emissions from transformation processes where the fluorinated GHG reactants are produced at another facility must be identified and reported separately from other fluorinated GHG emissions.
- (1) The identity and quantity of the process activity used to estimate emissions (e.g., tons of product produced or tons of reactant consumed).
- (2) The site-specific, process-vent-specific emission factor(s) or emission calculation factor for each process vent.
- (3) The mass of each fluorinated GHG emitted from each process vent (metric tons).
- (4) The mass of each fluorinated GHG emitted from equipment leaks (metric tons).
- (d) Reporting for missing data. Where missing data have been estimated pursuant to §98.125, you must report the

reason the data were missing, the length of time the data were missing, the method used to estimate the missing data, and the estimates of those data.

- (e) Reporting of destruction device excess emissions data. Each fluorinated gas production facility that destroys fluorinated GHGs must report the excess emissions that result from malfunctions of the destruction device, and these excess emissions would be reflected in the fluorinated GHG estimates in §98.123(b) and (c). Such excess emissions would occur if the destruction efficiency was reduced due to the malfunction.
- (f) Reporting of destruction device testing. By March 31, 2012 or by March 31 of the year immediately following the year in which it begins fluorinated GHG destruction, each fluorinated gas production facility that destroys fluorinated GHGs must submit a report containing the information in paragraphs (f)(1) through (f)(4) of this section. This report is one-time unless you make a change to the destruction device that would be expected to affect its destruction efficiencies.
- (1) Destruction efficiency (DE) of each destruction device for each fluorinated GHG whose destruction the facility reflects in §98.123, in accordance with §98.124(g)(1)(i) through (iv).
- (2) Chemical identity of the fluorinated GHG(s) used in the performance test conducted to determine destruction efficiency, including surrogates, and information on why the surrogate is sufficient to demonstrate the destruction efficiency for each fluorinated GHG, consistent with requirements in §98.124(g)(1), vented to the destruction device.
- (3) Date of the most recent destruction device test.
- (4) Name of all applicable Federal or State regulations that may apply to the destruction process.
- (5) If you make a change to the destruction device that would be expected to affect its destruction efficiencies, submit a revised report that reflects the changes, including the revised destruction efficiencies measured for the device under §98.124(g)(2)(ii), by March 31 of the year that immediately follows the change.

- (g) Reporting for destruction of previously produced fluorinated GHGs. Each fluorinated gas production facility that destroys fluorinated GHGs must report, separately from the fluorinated GHG emissions reported under paragraphs (b) or (c) of this section, the following for each previously produced fluorinated GHG destroyed:
- (1) The mass of the fluorinated GHG fed into the destruction device.
- (2) The mass of the fluorinated GHG emitted from the destruction device.
- (h) Reporting of emissions from venting of residual fluorinated GHGs from containers. Each fluorinated gas production facility that vents residual fluorinated GHGs from containers must report the following for each fluorinated GHG vented:
- (1) The mass of the residual fluorinated GHG vented from each container size and type annually (tons).
- (2) If applicable, the heel factor calculated for each container size and type.
- (i) Reporting of fluorinated GHG products of incomplete combustion (PICs) of fluorinated gases. Each fluorinated gas production facility that destroys fluorinated gases must submit a onetime report by June 30, 2011, that describes any measurements, research, or analysis that it has performed or obtained that relate to the formation of products of incomplete combustion that are fluorinated GHGs during the destruction of fluorinated gases. The report must include the methods and results of any measurement or modeling studies, including the products of incomplete combustion for which the exhaust stream was analyzed, as well as copies of relevant scientific papers, if available, or citations of the papers, if they are not. No new testing is required to fulfill this requirement.

§98.127 Records that must be retained.

In addition to the records required by §98.3(g), you must retain the dated records specified in paragraphs (a) through (j) of this section, as applicable.

- (a) Process information records.
- (1) Identify all products and processes subject to this subpart. Include the unit identification as appropriate.